United States Environmental Protection Agency
Region 4
Atlanta Federal Center
61 Forsyth St. SW, Atlanta, GA 30303-8960

July 3, 2018

MEMORANDUM

SUBJECT: Comments on Patterson Road VI studies
Patterson Road VI Site
Greensboro, NC

FROM: Ben Bentkowski, P.G.
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Superfund Resource & Scientific Integrity Branch

TO: Perry Gaughan
Removal Project Manager

At the request of the State of North Carolina, R4 Superfund has been investigating the conditions in a neighborhood south of Patterson Street, Greensboro, NC, primarily along Camborne and Swan Streets. Two rounds of sampling have been performed by TetraTech, EPA's START contractor. The first round of sampling consisted of groundwater sampling of a few available monitoring wells, surface water sampling from a ditch and small creek, and air sampling from various locations including soil gas, crawl space locations and one ambient air sample. The neighborhood has a mixture of slightly older homes which are built primarily with a brick/block enclosed crawlspace with small vents and newer homes built slab on grade. Perhaps one or two homes have daylight basements.

After reviewing the data from two rounds of investigation in the neighborhood south of Patterson Street, several points stand out. The October 2016 sampling of upgradient well MW-27S indicated PCE and TCE at 850 µug/L and 360 µg/L, respectively. A surface water sample collected from the upstream end of a ditch near where it flows under Cambourne Street had PCE and TCE at 410µg/L and 530 µg/L respectively. Soil gas sample PSS-SC-2836CAM had PCE

and TCE at 3500 and 180 μg/m^3, respectively. Ambient air sample PSS-CS-2836CAM-FENCE indicated TCE present at 0.73 μg/m^3. Crawlspace air samples from 2834 and 2832 Camborne St indicated 0.81 and 6.6 μg/m^3 of TCE, respectively. Crawlspace air samples from 1407 and 1405 Swan St indicated 0.98 and 0.84 μg/m^3 of TCE, respectively. All of these results are above the residential indoor screening level of 0.48 μg/m^3. Benzene was noted in many crawlspace samples but in no other results from other media suggesting a potential nearby gas can or other source.

The results from the March 2018 soil gas sampling were less demonstrative than the October 2016 sample analysis. For the five sample results, there were no detections of PCE or TCE. Also of note was the wet or saturated soils which prohibited sampling in several planned locations. Because of the conditions, this round of data did little to advance the understanding of the contaminant distribution in this area.

It is clear that there is a solvent plume in the groundwater under this neighborhood and this plume is providing at least PCE and TCE contamination to the soil gas and surface water. It is likely that the migration of the PCE and TCE continues into the crawlspaces of the houses sampled so far and also likely to the one ambient air sample collected. These results are in excess of the TCE residential indoor air screening value. Additional, more definitive and more rapid sampling needs to be performed.

It is recommended that

- the further investigation of this neighborhood should include the Site Evaluation Section
- the EPA/ERT TAGA Mobile Lab be engaged to evaluate the indoor air, ambient air and crawlspace and subslab air of this neighborhood.
- previously sampled monitoring wells and surface water locations should be resampled to begin establishing a baseline of analytical results.
- a search for upgradient potential sources of the solvent contamination in the groundwater should be conducted. This information may factor into the future plans for the investigation and risk evaluation of this neighborhood.

If you have any questions, please don't hesitate to contact me.

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